ABSTRACT

2	The invention is directed to amphipathic polymeric particles that serve as both the
3	dispersant and the binder in water based inks, ink compositions containing these
1	particles, and methods for making the particles. The polymeric particles contain both
5	hydrophilic and hydrophobic moieties with a pre-determined structure, and have an
5	average diameter of 50 to 500 nm. The amphipathic polymeric particles may be prepared
7	by a side-chain conversion method or a polymerization process involving an ATRP step,
3	with or without a cross-linking agent. This invention improves the stability of polymer
•	and inks by both ionic and steric stabilization of the suspended polymer particles.